

REMARKS

Applicants request reconsideration and allowance of the present application in view of the foregoing amendments and the following remarks.

Claims 1, 3, 4, 6-11, 13, 16, 20-23, 25, 26, and 28 are pending in the present application. Claims 1, 4, 7, 11, 16, 23, and 26 are the independent claims.

Claims 2 and 5 have been cancelled without prejudice or disclaimer, and claims 1, 3, 4, 6, 7, and 11 have been amended by the present Amendment.

Claims 2, 3, 5-7, 10, 11, 12, 16, 20-23, 26, and 28 stand rejected under 35 U.S.C. § 112, first paragraph, as non-enabled. Claim 12 is no longer pending for examination. Thus, the rejection of claim 12 appears moot. Claims 2 and 5 have been cancelled, but have been incorporated, respectively, into independent claims 1 and 4. The remainder of this rejection is respectfully traversed.

The enablement requirement of the first paragraph of 35 U.S.C. 112 requires that the specification, as filed, describe how to make and how to use the invention defined by the claim(s). A claim is enabled when one reasonably skilled in the art could make or use the invention from the disclosures in the application coupled with information known in the art without undue experimentation. (See MPEP, §§ 2164-2164.01). For this reason, an application need not teach, and preferably omits, what is well known in the art. (MPEP, § 2164.01) (emphasis added).

The question of enablement is one of law based on underlying factual findings. And, a determination that "undue experimentation" would have been needed to make and use a claimed invention is not a single, simple factual determination. For example, the fact that experimentation may be complex does not necessarily make it undue. (See MPEP, §§ 2164-2164.01).

Turning to the substance of the rejection under the first paragraph of 35 U.S.C. § 112, the Office Action specifically contends that the recitation "track-defect-processing" in claims 2, 5, 10, 11, 16, 20, 21, 23, and 26 is not enabled. (Office Action, page 2). This contention is respectfully traversed.

The subject matter of now-cancelled claim 2, which has been incorporated into independent claim 1 by this amendment, for example, recites the following feature:

....if errors do not occur in the cylinder at the predetermined

distance from the cylinder having skew '0', track-defect-processing all tracks within the predetermined distance from the cylinder having skew '0', such that a normal search operation cannot be performed...."

Thus, track-defect-processing is defined, in this claim, as a process applied to specified tracks that prevents a normal search operation from being performed on the specified tracks. Further, this process is described as being part of a track inspection method. (Specification, paragraph [0047]). This track inspection method is illustrated in FIG. 5 and is described as preventing superimposed writing to a same track. (Specification, paragraph [0050]). In particular, the written disclosure explains that all tracks in a range from an X track to a Y track (the tracks within the recited predetermined distance from the cylinder with a skew of "0") are all processed and that, as a result of this processing, a normal search operation cannot be performed on these tracks. (Specification, paragraph [0047]).

In sum, Applicants' disclosure teaches that: track-defect-processing is part of a track inspection method that prevents superimposed writing to a same track; track-defect-processing is applied to all tracks within a predetermined distance from an inspected track to a cylinder having a skew of "0"; and that track-defect-processing results in the preclusion of a normal search operation on all of the tracks between the cylinder having a skew of "0" and the inspected track.

Based on the foregoing, Applicants respectfully submit that one of ordinary skill in the art would have been able to use the invention of claims 2, 5, 10, 11, 16, 20, 21, 23, and 26 based on the teachings of Applicants' disclosure and his/her the knowledge of the art. And, if any experimentation would have been necessary to use the claimed invention, given: the nature of the invention; the state of the relevant art; the high skill level of one of ordinary skill; the high level of predictability in the art; and the amount of direction provided by the inventors as described above, (MPEP, § 2164.01(a)) any experimentation necessary to use the claimed invention would not be undue. Thus, as a matter of law, the enablement requirement of the first paragraph of 35 U.S.C. § 112 is satisfied.

Accordingly, favorable reconsideration and withdrawal of the rejection under the first paragraph of 35 U.S.C. § 112, are respectfully requested.

Claims 1-11, 13, 16, 20-23, 25, 26, and 28 under stand rejected 35 U.S.C. § 103(a) as being unpatentable over Sacks et al. (U.S. Patent Publication No. 2003/0197968 – hereinafter Sacks) in view of Serrano et al., (U.S. Patent No. 6,181,500 – hereinafter Serrano). All rejections are respectfully traversed.

Amended, independent claim 1 recites: "...if errors do not occur in the cylinder at the predetermined distance from the cylinder having skew '0', track-defect-processing all tracks within the predetermined distance from the cylinder having skew '0', such that a normal search operation cannot be performed; and if errors occur in the cylinder at the predetermined distance from the cylinder having skew '0', determining that all of the servo information is not correctly written, and writing the servo information for the entire disc again."

Amended, independent claim 4 recites: "...if errors do not occur in the cylinder at the predetermined distance from the cylinder having skew '0', track-defect-processing all tracks within the predetermined distance from the cylinder having skew '0', such that a normal search operation cannot be performed; and if errors occur in the cylinder at the predetermined distance from the cylinder having skew '0', determining that all of the servo information is not correctly written, and writing the servo information for the entire disc again."

Amended, independent claim 7 recites: "...if the number of the cylinder in which the error occurs corresponds to the cylinder at the predetermined distance from the cylinder having skew '0', determining that all of the servo information is not correctly written and writing the servo information for the entire disc again, and if not, track-defect-processing the cylinder in which the error occurs; and if all cylinders have been inspected, track-defect-processing all tracks within the predetermined distance from the cylinder having skew '0', such that a normal search operation cannot be performed."

Amended, independent claim 11 recites: "...if the number of the cylinder in which the errors occur corresponds to the cylinder at the predetermined distance from the cylinder having skew '0', a third operation of determining that all of the servo information is not correctly written and writing the servo information for the entire disc again, and if not, track-defect-processing the cylinder in which the error occurs and moving the transducer to a next cylinder, and repeating the first, second, and third operations, and if the cylinder in which the servo information in the first operation is inspected corresponds to a cylinder having a largest number, a fourth operation of track-defect-processing all tracks within a predetermined distance from the cylinder having skew '0', such that a normal search operation cannot be performed."

Independent claim 16 recites: "...if the given track is located at the predetermined distance from the skew zero track, rewriting all of the servo information, and inspecting the servo information again, and once all tracks are inspected and no abnormality is found on the track at the predetermined distance from the skew zero track, track-defect-processing all tracks within the predetermined distance from the skew zero track, such that a normal search operation cannot be performed."

Independent claim 23 recites: "...if the given track is located at the predetermined distance from the skew zero track, rewrite all of the servo information, and inspect the servo information again, and once all tracks are inspected, track-defect-process all tracks within the predetermined distance from the skew zero track, such that a normal search operation cannot be performed."

And independent claim 26 recites: "...an eighth set of instructions, that, if the given track is located at the predetermined distance from the skew zero track, rewrites all of the servo information, and inspects the servo information again; and a ninth set of instructions, that once all tracks are inspected, track-defect-processes all tracks within the predetermined distance from the skew zero track, such that a normal search operation cannot be performed."

Applicants respectfully submit that neither Sacks nor Serrano teaches or suggests at least the aforementioned features of independent claims 1, 4, 7, 11, 16, 21, 23, and 26. Thus, without conceding the propriety of the asserted combination, it is respectfully submitted that the asserted combination is likewise deficient, even in view of the knowledge of one of ordinary skill in the art.

By the aforementioned features, advantages and increased utility are realized.

The primary citation to Sacks relates to bi-directional servo tracking writing to minimize sidewall writing at high skew angles and discusses defect processing to rewrite only a defected portion in servo information including a track ID, a sector, burst, etc. Sacks only rewrites only a track ID, a sector ID, or a burst.

The Office Action acknowledges that Sacks does not teach or suggest the aforementioned features of independent claims 1, 4, 7, 11, 16, 21, 23, and 26. (Office Action, page 3). Nonetheless, the Office Action contends that Serrano provides the necessary disclosure of these features. Applicants respectfully disagree.

Initially, contrary to the Examiners assertion in the December 6, 2006 Advisory Action, Applicants respectfully submit that Serrano does not teach or suggest rewriting all servo information when an error is detected. Thus, Serrano cannot remedy the conceded deficiency in Sacks.

Serrano relates to a self servo rewrite method and apparatus and discusses a method and device to correct errors that occur during servowriting without requiring a disk to be re-servowritten, i.e., without requiring all of the servo information for the entire disk to be rewritten. (Serrano, at col. 2, lines 21-24).

Specifically, in the portion cited in the Advisory Action, Serrano discusses three alternative courses of action when a defective servo sectors are detected. First, only for those servo sectors that are determined to be defective, either the entire servo pattern for a given defective sector is rewritten (emphasis added), or only a portion of the servo pattern for that sector is rewritten (e.g., only a particular PES burst is written, or a digital information field or a track ID is written). Or, alternatively, the offending field in a given defective sector is erased. As a further alternative, for a given defective sector, a separate field is written, that specifies if any of the fields in the given defective sector are to be ignored. (Serrano, at FIGS. 5-7, col. 6, lines 29-34, and col. 7, lines 39-60).

But absent from Serrano is any teaching or suggestion of the aforementioned features of independent claims 1, 4, 7, 11, 16, 21, 23, and 26. Specifically, as explained above, Serrano teaches three alternative courses of action when a defect is present. But none of the three alternative courses of action involve rewriting all of the servo information.

Additionally, in rejecting claim 2, the Office Action states: "...since Serrano et al discloses detection of servo errors during a servo write/rewrite process, it is considered that 'normal search operations' do not occur during such servo write/rewrite process" (Office Action, page 3.)

Initially, the Office Action provides no basis to support such an assertion. If the rejection of this subject matter is maintained, for the sake of compact prosecution, Applicants request a specific citation as a basis for such an assertion.

Secondly, contrary to the Office Actions interpretation, there is no limitation in the claims that prohibits a normal search operation from being performed on the track-defect-processed tracks only during a servo write/rewrite process.

Applicants respectfully submit that Serrano neither teaches nor suggests that if no abnormality is found on the track at the predetermined distance from the skew zero track, track-defect-processing all tracks within the predetermined distance from the skew zero track, such that a normal search operation cannot be performed.

Thus, Applicants respectfully submit that Serrano cannot reasonably be said to teach or suggest the aforementioned features of independent claims 1, 4, 7, 11, 16, 21, 23, and 26. Thus, Serrano adds nothing that would remedy the aforementioned deficiency in Sacks.

And, for this reason, the combination of Sacks and Serrano also fails to achieve the aforementioned advantages.

Accordingly, favorable reconsideration and withdrawal of the rejection under 35 U.S.C. §

103 are respectfully requested.

In view of the foregoing, Applicants respectfully submit that the independent claims patentably define the present invention over the citations of record. Further, the dependent claims should also be allowable for the same reasons as their respective base claims and further due to the additional features that they recite. Separate and individual consideration of the dependent claims is respectfully requested.

Lastly, Applicants note the Office Action's allegation that in Amendment filed June 22, 2006, that Applicants argued a feature discussed in the specification but not recited in the claims. (Office Action, pages 4 and 5). Additionally, the Advisory Action similarly asserts that "[t]he features upon which applicant relies (i.e., rewriting all of the servo information) are not recited in the rejected claims." (Advisory Action, Continuation Sheet). Applicants respectfully disagree.

A review of pages 10-12 of the Amendment filed June 22, 2006 shows that the quote selected by the Office Action of "i.e., rewriting the servo information for the entire disk" to reject Applicants argument was in fact a description of the result of the expressly recited features upon which Applicants argument was based. Indeed, immediately preceding the subject quote is an explanation that the aforementioned features result in the rewriting of "all of the servo information." (Amendment filed June 22, 2006, page 12). This argument was not addressed in the Response to Arguments.

Further, Applicants note the recitation of independent claims 16, 21, 23, and 26.

Applicants believe that the present Request is responsive to each of the points raised by the Examiner in the Office Action. But if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to such matters.


There being no further outstanding objections or rejections, it is submitted that the present application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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